EXECUTIVE SUMMARY

Prepared October 26, 2000

Mine Name: Duchesne County Asphalt Mine
Operator: Duchesne County
P.O. Box 356
174 North Center St.
Duchesne, Utah 84021

Telephone: (435) 738-2468
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Contact Person: Doug Nielsen

I.D. No.: M/047/028
County: Uintah
New/Existing: SMO expansion to LMO
Mineral Ownership: Esther W. Fausett, Duchesne County
Surface Ownership: Esther W. Fausett, Duchesne County
Lease No.(s): not applicable
Permit Term: life of mine

Life of Mine: 5+ years

Legal Description: W1/2 NW 1/4, and NW 1/4 SW 1/4, Section 19, T2N, R1E, UBM

Mineral(s) to be Mined: tar sands

Acres to be Disturbed: 36.86 acres

Present Land Use: mining, grazing, big game habitat

Postmining Land Use: grazing, big game habitat

Variances from Reclamation Standards (Rule R647) Granted: R647-4-111.7 - Highwalls: allowed to remain at angles steeper than 45 degrees. The pit will be partially backfilled at final reclamation using overburden and waste materials immediately adjacent to the excavation. The final pit configuration will include a section of near vertical highwall with a slope leading down into the partially backfilled pit. Boulders or berms will be placed to discourage access to the base of the remaining highwall. Signs will be placed warning of the highwall hazard. Public access on the private land will be restricted by a locked gate and fencing currently in place.

Soils and Geology

Soil Description: analysis for soils in 1.5 acre salvaged topsoil stockpile: Electrical Conductivity = 0.7 dS/m, SAR = 1.83, Available P = 0.4 mg/kg, Available K = 200 mg/kg, available NO3-N = 2.8, Wakley-Black % organic material = 0.5, texture clay loam, % sand 28, % silt 35, % clay 37.

pH: 7.9

Special Handling Problems: a large portion of the pit and processing area was disturbed prior to the Act without salvaging topsoil for reclamation. Topsoil for use in reclamation of the pit and processing area is limited.

Geology Description: The Whiterocks deposit lies on the northern flank of the Uinta Basin. The Whiterocks River has eroded through the deposit exposing the strata consisting primarily of steep, southeast-dipping Triassic and Jurassic rocks. At the mouth of Whiterocks Canyon the Wasatch Formation (Paleocene-Eocene) lies unconformably upon south-dipping rocks of the Mancos Shale and Mesaverde Group (Cretaceous). The Navajo Sandstone (Jurassic) lies unconformably above the Chinle Formation (Triassic) and unconformably below the Carmel Formation (Jurassic). The Navajo Sandstone, which is also called the Nugget Sandstone in northeastern Utah, is bitumen-saturated in and around Whiterocks Canyon. The enclosing Chinle and the Carmel Formations

are comprised mainly of impervious shales that may have acted to seal in oil migrating into the Navajo. The deposit is associated with the crest of a steep, south-plunging anticlinal nose (Whiterocks anticline) that subparallels the Whiterocks River. The influence of this structure on bitumen saturation is unknown.

Hydrology

Ground Water Description: ground water has not been encountered in the pit operations and no effects to ground water are anticipated. The pit area is 100 feet higher than the valley floor.

Surface Water Description: All surface runoff from the mining area is directed into the pit. The Whiterocks River is approximately 900 feet to the east and down gradient from the mining operation.

Water Monitoring Plan: none required.

Ecology

Vegetation Type(s); Dominant Species: Wyoming big sage, bitter brush, smooth brome, crested wheatgrass

Percent Surrounding Vegetative Cover: 21% vegetative cover, revegetation success standard would be 70% of the preexisting cover, or 15%

Wildlife Concerns. None. Deer and elk may be found in the general area, however, this operation should have no significant impacts upon their habitat.

Surface Facilities: truck scale and scale shack. All mining and crushing equipment is mobile and brought on-site during periods of active mining or crushing only.

Mining and Reclamation Plan Summary:

During Operations:
Surface mining of tar sands using conventional equipment such as bulldozers, front end loaders, and trucks. Removal of overburden, surface blasting of tar sands, processing tar sands through a crushing system and stockpiling the crushed material for use in paving roads in Duchesne County. Active mining and crushing take place on a seasonal basis

After Operations:
Reclamation of the extension area (approximately 20.88 acres including roads) will include plugging all drill holes, spreading soils and grubbed vegetation over the area, ripping roads to a depth of one to two feet, regrading road cuts close to the approximate original contour, and broadcast seeding the area immediately after completion of the earthwork, preferably in the fall

Reclamation of the cut and fill access road leading up to the extension area will include regrading to the approximate original contour, followed by broadcast seeding. The final regraded surface shall be left in an extremely roughened condition to minimize erosion, and enhance moisture retention. Rocks and grubbed vegetation should be randomly placed on the regraded area to discourage public access and break the area up visually

Reclamation of the pit and waste stockpile area (approximately 7.52 acres) shall include grading the waste material into the pit as partial backfill to provide for positive drainage, placing topsoil material over the backfill, spreading composted manure over the area at a rate of 10 ton/acre, ripping the compost into the upper six inches of soil, and broadcast seeding the area. The final surface shall be left in an extremely rough state to minimize erosion and discourage public access to the base of the highwall. Boulders or grubbed vegetation debris should also be used to discourage public access and break the reclaimed area up visually. Signs will be placed in several locations around the perimeter of the backfilled pit area identifying the highwall hazard.

Reclamation of the crushing area and material stockpile area (approximately 3.72 acres) shall include removal of all structures and debris, regrading to blend in with the surrounding area, deep ripping of all compacted areas such as roads or pads, spreading composted manure over the area at a rate of 10 ton/acre, ripping the compost into the upper six inches of soil, placing boulders or grubbed vegetation randomly across the area to discourage public access and visually break up the area, and broadcast seeding the area immediately after completion of the earthwork, preferably in the fall.

Reclamation of the topsoil stockpile and previous crushing and stockpiling areas (approximately 2.94 and 1.80 acres, respectively) shall include removal of all structures and debris, regrading the area to blend in with the surrounding area, spreading composted manure over the area at a rate of 10 ton/acre, ripping the compost into the upper six inches of soil, ripping of all compacted areas such as roads or pads to a depth of one to two feet, placing boulders or grubbed vegetation randomly across the area to discourage public access and to visually break up the area, and broadcast seeding the area immediately after completion of the earthwork, preferably in the fall.

The section of main access road into the mine site, as identified on Exhibit E, shall remain for the post-mine access to private lands. Reclamation of any other remaining access roads within the areas described above will include deep ripping, regrading to blend in with the natural topography, spreading composted manure over the soiled area at a rate of 10 ton/acre, placing boulders or grubbed vegetation randomly across the area to discourage public access and to visually break up the area, and broadcast seeding the area immediately after completion of the earthwork, preferably in the fall.

The natural drainage system leading into the reclaimed mine area shall be re-established through the site by grading drainage channels appropriately sized to match the undisturbed portion of the channel leading into the site. Reconstructed drainage channels shall also be broadcast seeded.

Surety

Amount: $89,800
Form: surety bond #
Renewable Term: 2005 dollars

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